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Sightings of sei whales (*Balaenoptera borealis*) on the South Western Atlantic

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ABSTRACT

The sei whale, Balaenoptera borealis (Lesson, 1828) is distributed worldwide but favour temperate and oceanic waters, . This note summarizes the results of 16 sightings of sei whales on the South Western Atlantic.

The sei whale, *Balaenoptera borealis* (Lesson, 1828) is found in all oceans but tends to remain in more temperate waters than the other rorquals. This species migrates considerable distances between higher latitude summer grounds and lower latitude winter grounds (Rice, 1998). Two subspecies, one in the Northern Hemisphere and the other in the Southern Hemisphere were identified by Tomilin (1946 in Rice, 1998). The Southern Hemisphere subspecies known as *B. b. schlegellii* (Flower, 1865) were found between the subtropical convergence and the Antarctic convergence during the austral summer. Only large animals were found south of the Antarctic convergence (Lockyer, 1977).

The sei whale was not exploited until the era of modern whaling at the end of the 1800´s. In the Southern Hemisphere they were caught from Brazil, Chile, Peru, South Africa and South Georgia. Between 1960 and 1970 over 110,000 sei whales were killed by the pelagic fleets in Antarctic waters (Horwood, 2002). In Argentine Patagonia, between 1929 and 1930, sei whales were reported to be captured by the company Weigel and Bohnen in the Golfo San Jorge area (46º06´S/67º38W). In 1979 whaling finished its operations on this species in the Southern Hemisphere (Horwood, 2002). The extent to which stocks have recovered since they gained full protection is uncertain (Reeves, R. R. *et al.*, 2003), as South Atlantic records of sei whale are very scarce (Barros, 1991; McDonald *et al.* 2005; Secchi *et al.* 2003)

This note presents the results of new records of sei whales for this region.

Opportunistic sightings during a Southern right whale project at Golfo San Jorge and a seabird project on the Islas Malvinas/Falkland Islands during 2004 -2006 were made from a land-based platform and an airplane.

Land-based observations were made from fixed points located at 46º14´S/67º36´W and 46º14´S/67º36´W at a height of 20m. 3´ scans in a 5´ interval were conducted with binoculars each to assess the presence of the whales in the study area. Ad Libitum observational techniques were also used to record data from each sighting.

Two sightings from Islas Malvinas/ Falkland Islands were made from an aircraft flying at an altitude of 100m, with a constant relative speed of approximately 240 km/h. In order to resight the groups, the aircraft returned to the first sighting position. The sea state was Beaufort scale 1, the visibility was good for every sighting and the water was clear.

A total of 17 sightings (65 whales) (Table 1) were recorded between August 2004 and March 2007. Sightings were recorded in February, March, May and from August to October. 58.82% of the reported sightings were in August and September in southern Patagonia but this could be biased because our effort was more focused in those months due to on-going Southern right whale field work. The largest recorded group contained 20 (n=1) sei whales and it was observed on 8th March 2006 at Isla Goycoechea/New Island (51º45´S/061º10´W). Group size ranged from 1 to 20 individuals ($\overline{X}$=3.82, SD=5.66), with 52.94% of the observed groups containing just a single whale.

In all Golfo San Jorge sightings, sei whales were travelling, five sightings had the animals heading N and for seven sightings, heading S. Table 1 shows that for the Golfo San Jorge area, the biggest group contained 4 individuals. The most common group size for sei whales south of 60º are one to four with ten being a maximum based on historic data (Lockyer, 1977). Reeves et al. (2002) also reported that during migration these individuals from this species either travel alone or in small groups. Our observations may suggest that this area may be an important one for the migration of this species.

On Feb 2005, 17 adult sei whales were observed feeding at 51º45´S/061º10´W in waters of 100m depth and interacting with approximately 1000 sea birds (Black browed albatross, *Thalassarche melanophris*, Imperial shag, *Phalacracorax (atriceps) albiventer*, Thin-billed prion, *Pachyptila belcheri*, Sooty shearwater, *Puffinus griseus)*. The prey could not be identified and no calves were observed. sei whales surface for few minutes with 5 whales normally breathing together at the same time. A second recording was made from a plane on 8th March 2006. 20 adult Sei whales were observed at 51º45´S/061º10´W. Whales were feeding and swimming in circles and interacting with hundreds of sea birds (Black browed albatross, and Thin-billed prions). There was no apparent reaction to the airplane and again, the prey could not be identified and no calves were observed. The Isla Goycoechea/New Island sightings can be explained by the fact that sei whales spend the summer months feeding in the subpolar higher latitudes (Horwood, 2002) as well as the aggregations of individuals on feeding grounds (Reeves *et al*., 2002)

Sei whales are infrequently sighted and known for their unpredictable occurrences, for many years they appeared in an area followed by their disappearance and subsequent absence (Tonnersen and Johnsen, 1982).

Further studies are necessary in order to assess the status of sei whales in the South Western Atlantic. This information will be useful for the conservation of the species in this area.

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Table 1. Sightings of Sei whales in the South Western Atlantic

Nº	**Date**	**Nº of individuals**	**Location**	**Platform**	**Source**
1	1 Aug 2004	3	Lat / Long	Land	Fund. Cethus
2	Feb 2005	17	51º45´S/061º10´W	Land	J.F. Masello
3	2 March 2005	1	45º52´S/067º28´W	Land	Fund. Cethus
4	2 March 2005	1	45º52´S/067º28´W	Land	Fund. Cethus
5	14 Aug 2005	1	46º14´S/67º36´W	Land	Fund. Cethus
6	16 Aug 2005	1	46º14´S/67º36´W	Land	C. Gribaudo
7	19 Aug 2005	1	46º14´S/67º36´W	Land	C. Gribaudo
8	31 Aug 2005	3	46º14´S/67º36´W	Land	Fund. Cethus
9	12 Sept 2005	4	46º14´S/67º36´W	Land	Fund. Cethus
10	17 Sept 2005	1	46º14´S/67º36´W	Land	Fund. Cethus
11	26 Sept 2005	2	46º14´S/67º36´W	Land	C. Gribaudo
12	29 Sept 2005	1	46º14´S/67º36´W	Land	C. Gribaudo
13	3 Oct 2005	3	46º27´S/67º29´W	Land	César Gribaudo
14	8 March 2006	20	51º45´S/061º10´W	Aircraft	J.F.Masello
15	2 May 2006	1	46º14´S/67º36´W	Land	César Gribaudo
16	4 Sept 2006	1	46º14´S/67º36´W	Land	Fund. Cethus
17	14 March 2007	4	51°15´S/059°15´W	Aircraft	J.F.Masello